

**REMARKS**

Applicants have amended Claims 1, 4, 9, and 15 to further distinguish Applicants' claimed invention. Reconsideration of the application in response to the Examiner's Office Action is respectfully requested.

**I. Claim Rejections Under 35 U.S.C. § 103(a)**

In the Office Action, the Examiner has rejected Claims 1-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Reiss et al., U.S. Patent 5,743,895 in view of Cook et al., U.S. Patent 5,562,740. Applicants respectfully disagree.

In Claim 1, Applicants claim:

A chlorine free disposable diaper having a multi-layered diaper assembly comprising:

an exterior layer comprising a non-woven material having a planar, soft, cloth-like surface layer;

a core layer made of non-chlorine bleached material for holding waste materials within the disposable diaper, wherein the non-chlorine bleached material is a TCF wood pulp mixture;

a containment layer coupled to a first side and a second side of the core layer for containing the waste material in the core layer and away from skin of a wearer, wherein the containment layer comprises a non bleached non-woven material;

a distribution layer coupled to the containment layer for evenly distributing waste material to the core layer, wherein the distribution layer comprises a non bleached non-woven material; and

an interior layer coupled to the distribution layer comprising a non-woven liquid permeable material.

In contrast, none of the prior art patents cited by the Examiner disclose a chlorine free disposable diaper that has a core layer made of a non-chlorine bleached material wherein the non-chlorine bleached material is a TCF wood pulp mixture. Furthermore, none of the cited prior art patents disclose a containment layer comprising a non bleached non-woven material coupled to a first side and a second side of the core layer for containing the waste material in the core layer and away from skin of a wearer, and a distribution layer comprising a non bleached non-woven material coupled to the containment layer for evenly distributing waste material to the core layer.

The Examiner contends that Cook et al. teaches non-chlorine bleached wood pulp as set forth in the Abstract and in column 5, line 63 to column 6, line 3. Applicants respectfully disagree. Cook discloses in column 5, line 63 to column 6, line 3 that wood fibers may be completely bleached, partially bleached, or unbleached. However, nowhere in column 5, line 63 to column 6, line 3 does it disclose or anticipate a non-chlorine bleached material wherein the non-chlorine bleached material is a TCF wood pulp mixture. Cook does disclose unbleached wood fibers. However, unbleached and non-chlorine bleached are not the same.

Cook discloses a process for reduced odor and improved

brightness of crosslinked fibers. The bleaching process in Cook discloses ECF (Elemental Chlorine Free) bleaching. However, ECF bleaching process is a bleaching method using chlorine dioxide instead of conventional chlorine gas and thus still has small traces of chlorine.

Cook discloses a process that uses an oxidizing bleaching agent selected from the group consisting of hydrogen peroxide, sodium peroxide, peracetic acid, chlorine dioxide, sodium hypochlorite, hydrogen chloride, and mixtures thereof (See, Column 14, lines 8-13). Cook further discloses that "In addition, conventional multi-stage bleaching and washing stages following crosslinking, have been found to provide desirable results. These would include DEP or DEH stages where D is chlorine dioxide, E is caustic extraction, P is peroxide and H is sodium hypochlorite." (See Column 14, lines 27-34). Thus, the process disclosed in Cook uses chlorine dioxide and thus has trace amounts of chlorine and will not be chlorine free as claimed by Applicants. Applicants use a non-chlorine bleached material that is a TCF wood pulp mixture. TCF wood pulp is totally chlorine free.

To further distinguish Applicants claimed invention from the cited prior art, Applicants disposable diaper has a

containment layer comprising a non bleached non-woven material coupled to a first side and a second side of the core layer for containing the waste material in the core layer and away from skin of a wearer. The disposable diaper may further have a distribution layer comprising a non bleached non-woven material coupled to the containment layer for evenly distributing waste material to the core layer. None of the cited prior art disclose a containment layer comprising a non bleached non-woven material coupled to a first side and a second side of the core layer for containing the waste material in the core layer and away from skin of a wearer, or a distribution layer comprising a non bleached non-woven material coupled to the containment layer for evenly distributing waste material to the core layer.

To further distinguish Applicants' claimed invention from the cited prior art, Applicants use a spunbond hydrophobic non-woven polypropylene material for the exterior layer and the exterior layer, the containment layer, the distribution layer, and the interior layer. None of the cited prior art discloses the above. Furthermore, the use of spunbond hydrophobic non-woven polypropylene material with the TCF wood pulp allows one to produce a diaper that is totally chlorine free (i.e., no trace amounts of chlorine like in the prior art).

For the above reasons, Applicants respectfully submit that the Examiner's rejections under 35 U.S.C. 103(a) has been effectively traversed and that Claims 1-20 are now in condition for allowance. Such action is earnestly solicited.

**II. Conclusion**

Applicants respectfully submit that Applicants' claimed invention is deserving of patent protection because it describes a useful and functioning apparatus which is patentably distinguishable over the prior art.

In conclusion, Applicants respectfully submit that this Amendment Letter, including the amendments to the Claims, and in view of the Remarks offered in conjunction therewith, are fully responsive to all aspects of the possible objections and rejections tendered by the Examiner in the Office Action. Applicant respectfully submits that he has persuasively demonstrated that the above-identified Patent Application, including Claims 1-2 and 4-20 are in condition for allowance. Such action is earnestly solicited.

If the foregoing does not place the case in condition for immediate allowance, the Examiner is respectfully requested to contact the undersigned for purposes of a telephone interview.

If there are any fees incurred by this Amendment Letter,

please deduct them from our Deposit Account NO. 23-0830.

Respectfully submitted,

  
Jeffrey D. Moy  
Reg. No. 39,307  
Attorney for Applicants

Weiss & Moy, P.C.  
4204 N. Brown Ave.  
Scottsdale, AZ 85251  
(480) 994-8888 (Phone)  
(480) 947-2663 (Fax)

JDM/msw